Developing a Regional Invasive Species Strategy for the United Kingdom’s Overseas Territories in the South Atlantic

C. Stringer1, C. Shine2, A. Darlow1, and B. Summers1

1 The Royal Society for the Protection of Birds, Potton Rd, Sandy, UK. <clare.stringer@rspb.org.uk>. 2 Consultant on Environmental Policy and Law and Associate, Institute for European Environmental Policy, 37, Rue Erlanger, 75016 Paris, France.

Abstract Each of the United Kingdom’s Overseas Territories (UKOTs) in the South Atlantic has a unique assemblage of endemic plants and animals, for which the greatest recognised threat is the impact of invasive species. As well as negative impacts on biodiversity values, invasive species also have significant economic impacts, particularly in those UKOTs with low annual GDP per capita. The permanent human populations of all of the South Atlantic UKOTs are small, ranging from C. 260 on Tristan da Cunha to C. 4000 on St Helena. With such low human and financial resources, it is vital to share experiences and avoid duplicating effort wherever possible. Development of a regional strategy for invasive species was seen as a key step to build links for future cooperation; especially to enable collaboration for eradication and control of invasive species in the region, and to prevent new establishment. A workshop involving representatives from all partner organisations, including representatives from agriculture, environment, and border security, along with scientists and non-governmental stakeholders, was held on Ascension Island in May 2009. This allowed a fully-consultative approach to strategy development to be taken. Priorities were developed by those attending the workshop, and consulted with other stakeholders remotely. The Regional Invasive Species Strategy will form a basis for South Atlantic invasive species work in the future.

Keywords: Strategy, invasive species, United Kingdom Overseas Territories, policy, legal framework

INTRODUCTION

The United Kingdom Overseas Territories (UKOTs) in the South Atlantic are St Helena, Ascension and Tristan da Cunha, the Falkland Islands, South Georgia and the South Sandwich Islands, and the British Antarctic Territory. St Helena, Ascension and Tristan da Cunha share a single Constitution and are legally considered to be a single UKOT; however, each has a separate Island Council, unique legislation, and unique ecology. Each of them is considered separately in this paper, and each was a separate partner in the project described below. The UKOTs have retained a connection with the United Kingdom due to the express wish of their inhabitants (FCO 1999).

In 2006, a three-year project commenced, aimed at increasing local capacity to reduce the impacts of invasive alien species on the (UKOTs) in the South Atlantic (RSPB 2006; Miller 2007, 2008; Stringer 2010). The project was funded by the European Commission’s Ninth European Development Fund, and provided resources of some €2 million over the three-year implementation period. The project did not include the British Antarctic Territory due to its complex management systems and environment, but covered the other South Atlantic UKOTs. The project was led by the St Helena Government and implemented by the Royal Society for the Protection of Birds (RSPB) (Stringer 2009, 2010; Miller 2007, 2008).

The UKOTs that were included in the project are all small island states (Procter and Fleming 1999) (Fig. 1). They have small human populations of between C. 260 on Tristan da Cunha to C. 4000 on St Helena (South Georgia and the South Sandwich Islands are not permanently inhabited but there is a small transient population on South Georgia). In contrast to the United Kingdom itself, the UKOTs have a wealth of endemic species of plants and animals. Table 1 gives some background information on each of the UKOTs discussed in this paper.

Invasive alien species (IAS) have been shown to be a particularly significant threat to biodiversity on small islands such as these UKOTs (Veitch and Clout 2002; Blackburn et al. 2004; BirdLife International 2008), and have also been shown to have potential negative impacts on small island economies (Reaser et al. 2007; Jenner 2009). In 2006, there were a minimum of 2261 non-native species recorded as occurring across the UK Overseas Territories (and the Crown Dependencies of Jersey, Guernsey and the Isle of Man) (Varnham 2006). The impacts of most of these species were unrecorded. However, several avian extinctions have been recorded (Table 1), probably due to invasive species impacts (Hilton et al. 2001). The impacts of introduced mammals have been particularly significant (Hilton and Cuthbert 2010).

With the limited human and financial resources in the region, it was considered that, as well as taking practical action at a local level, it was vital to share experiences and avoid duplicating effort wherever possible. Development of a regional strategy for invasive species was seen as a key step to building links for future cooperation, especially to enable collaboration for eradication and control of invasive species in the region, and to prevent new species becoming established.

DEVELOPING A STRATEGY – CONTEXT

The international Convention on Biological Diversity (CBD) has identified IAS as a major cross-cutting theme. It requires Parties “as far as possible and as appropriate, (to)
prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species” (Article 8(h)). In 2002, the CBD Conference of the Parties adopted specific Decision and Guiding Principles (Decision VI/23 on Alien Species that threaten ecosystems, habitats and species (COPVI, The Hague, April 2002)) to help Parties implement this Article. The Decision urges Parties, other governments and relevant organisations to develop IAS strategies and action plans at national and regional levels.

The UK is a Party to the CBD, and all UKOTs are included in the UK Biodiversity Action Plan 1994 which furthers CBD implementation. Individual UKOTs may take on commitments under multilateral environmental agreements (MEAs) where the UK (as sovereign state) has signed the instrument concerned and asks, at the UKOT’s request, for an MEA to be extended to that territory. St Helena, Ascension and Tristan da Cunha currently implement the CBD in this way.

The main UK-UKOT framework for integrating environmental protection across sectoral policies and implementing MEAs is contained in the Environmental Charters signed by each UKOT government and the UK government on 26 September 2001. Guiding Principle 7 of each Charter is “to safeguard and restore native species, habitats and landscape features, and control or eradicate invasive species”.

In response to the CBD Decision, and recognising the need for coordinated action on IAS, regional strategies have been developed by the Council of Europe (Genovesi and Shine 2004); and the Secretariat for the Pacific Regional Environment Programme (Tye 2009, Sherley 2000). The European Union (EU) has started a process that may eventually lead to publication of an EU Strategy (Brussels, 3.12.2008, COM(2008) 789 final). Strategies have also been developed by many individual countries, including by Great Britain (GB Non-native Species Secretariat 2008) and New Zealand, a country that is recognised as a world leader in its approach to invasive species (Biosecurity Council 2003). The Great Britain (GB) Strategy does not include the UKOTs in its scope; being limited to England, Scotland and Wales only (GB Non-native Species Secretariat 2008).

### Table 1 Information on the South Atlantic United Kingdom Overseas Territories (UKOTs)

<table>
<thead>
<tr>
<th>UKOT</th>
<th>Land area (km²)</th>
<th>No of islands</th>
<th>Usual Human population</th>
<th>Endemic taxa</th>
<th>Avian extinctions recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>St Helena</td>
<td>122</td>
<td>1</td>
<td>4000</td>
<td>51</td>
<td>8</td>
</tr>
<tr>
<td>Ascension</td>
<td>91</td>
<td>1</td>
<td>1000</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Tristan da Cunha</td>
<td>201</td>
<td>4</td>
<td>260</td>
<td>29</td>
<td>2</td>
</tr>
<tr>
<td>Falkland Islands</td>
<td>12,173</td>
<td>c. 700</td>
<td>2000</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td>South Georgia and South Sandwich Is</td>
<td>3903</td>
<td>c. 20</td>
<td>&lt;30</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

1. This number should be considered to be the “main” islands in each group.
2. Figures from Procter and Fleming (1999), includes plants and birds, but not invertebrates as numbers are so uncertain.
   St Helena, Ascension and Tristan da Cunha are considered separately

### Table 2 Section headings in invasive species strategies (Biosecurity Council 2003; Genovesi and Shine 2004; GB Non-native Species Secretariat 2008; Tye 2009; Shine and Stringer 2010).

<table>
<thead>
<tr>
<th>Great Britain</th>
<th>Pacific</th>
<th>European</th>
<th>New Zealand</th>
<th>South Atlantic</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Prevention</td>
<td></td>
<td></td>
<td></td>
<td>C Prevention</td>
</tr>
<tr>
<td>7. Early detection, surveillance, monitoring and rapid response</td>
<td>C1 Biosecurity</td>
<td>C2 Management of established invasives</td>
<td></td>
<td>D Monitoring, early detection and rapid response</td>
</tr>
<tr>
<td>8. Mitigation, control and eradication</td>
<td>C3 Restoration</td>
<td>C2 Management of established invasives</td>
<td></td>
<td>E Control, management and restoration</td>
</tr>
<tr>
<td>9. Building awareness and understanding</td>
<td>A1 Generating support</td>
<td>C2 Management of established invasives</td>
<td></td>
<td>A Building awareness and support</td>
</tr>
<tr>
<td>10. Legislative framework</td>
<td>A3 Legislation, Policy and Protocols</td>
<td>A1 Generating support</td>
<td></td>
<td>A Building awareness and support</td>
</tr>
<tr>
<td>11. Research</td>
<td>B1 Baseline and monitoring</td>
<td>A2 Building capacity</td>
<td>Building awareness and support</td>
<td>A Building awareness and support</td>
</tr>
<tr>
<td>12. Information exchange and integration</td>
<td>A2 Building capacity</td>
<td>A1 Generating support</td>
<td>Institutions and institutional frameworks</td>
<td>A Building awareness and support</td>
</tr>
<tr>
<td>13. Research</td>
<td>B3 Research on priorities</td>
<td>1. Building awareness and support</td>
<td>B Coordination, cooperation and capacity-building</td>
<td></td>
</tr>
<tr>
<td>14. Collecting, managing and sharing information</td>
<td>B3 Research on priorities</td>
<td>1. Building awareness and support</td>
<td>B Coordination, cooperation and capacity-building</td>
<td></td>
</tr>
</tbody>
</table>
Four Strategies were analysed, and all were found to have a similar (though not identical) set of section headings, or groups of priorities (Table 2). All adhered to the hierarchical approach as recommended by the CBD Guiding Principles, and included sections on prevention, early detection, and management of established alien species. Two of the Strategies also included sections dealing with restoration, as without restoration work, sites may be reinvaded when invasive species have been removed.

All Strategies analysed gave prominence to building awareness and support, with the Bern and Pacific Strategies making this the first section in their documents. Other elements dealt with by all Strategies included legislation and institutional arrangements, research, building capacity and coordination. The need for robust prioritisation was also highlighted in two Strategies (Pacific and New Zealand).

STRAATEGY DEVELOPMENT - PROCESS

The South Atlantic UKOTs represent a very small number of people (fewer than 10,000) spread over a huge area of ocean (some 40,000 square kilometres). In order to facilitate development of a South Atlantic Invasive Species Strategy, a workshop involving representatives from all partner organisations, including agriculture, environment, and border security personnel, along with scientists and non-governmental stakeholders, was held on Ascension Island in May 2009. This allowed a consultative approach to strategy development to be taken, despite a widely dispersed population. In addition to local stakeholders, a number of experts from outside the region with expertise in invasive species strategy development were invited to participate.

The key section headings / priority groupings from the Strategies that had been analysed were used as a basis for sessions during the five-day workshop. Workshop participants were asked to identify priorities in each focal area in relation to their own Territory and the region as a whole. Small “break-out” groups were used to facilitate participation from different individuals. Workshop outputs were captured electronically after each session. Participation from Tristan da Cunha was enabled by emailing session outputs to the Tristan Conservation Department daily, and feeding comments back into discussions.

Drafting of the strategy was led by Clare Shine and coordinated electronically through a web-based group. Workshop outputs were captured electronically after each session. Participation from Tristan da Cunha was enabled by emailing session outputs to the Tristan Conservation Department daily, and feeding comments back into discussions.

The South Atlantic Invasive Species Strategy largely follows the lead of the other documents discussed above. It starts by setting out an inspirational vision for the region:

“The South Atlantic is the best-kept secret in the world. Our islands, our people and our biodiversity are unique. We will work together to maintain and restore native ecosystems, prevent further damage from invasive species and to support sustainable livelihoods through actions driven by local communities, coordinated regionally and supported internationally.”

This vision was drafted during the Ascension workshop, which was the first opportunity that many of the environmental professionals in the South Atlantic had to meet. It is hoped that the networks built during this meeting will lead to future cooperative initiatives in the region.

The main sections in the Strategy are listed in Table 2, and appear in the following order:

- **Building awareness and support:** includes actions related to securing local, UK-level and international support for invasive species work, including fund-raising.
- **Coordination, cooperation and capacity building:** focuses on building a shared regional identity and coordinating mechanism as well as improving systems within each Territory. Establishment of a regional information exchange system and research plan are also proposed.
- **Prevention:** includes actions related to the establishment of an effective biosecurity system for each Territory.
- **Monitoring, early detection and rapid response:** includes actions required to develop an early warning system, improve monitoring and enable contingency planning.
- **Control, management and restoration:** encourages the development of tools to support local management decisions, as well as including invasive species management and habitat restoration goals within government decision-making processes.

Along with the objectives, the strategy includes sections on implementation and monitoring, and general background information. Annexed to the strategy is an action and implementation plan. This includes a detailed set of tasks relating to each of the objectives, along with a lead agency or UKOT, a delivery date, and an estimate of costs where possible (Shine and Stringer 2010). Implementation will be monitored and resources will be sought externally to allow specific objectives to be achieved.

THE FUTURE AND RECOMMENDATIONS

At the time of writing, the South Atlantic Invasive Species Strategy has just been published, following final approval by Territory Councils and Governments. It is very important that the strategy is owned by local authorities, so this is a vital step. A formal launch of the strategy is now planned, and an online system for monitoring progress will be established. It is hoped that the strategy will be revised in five years time.

During the process of preparing the strategy, it was evident that there are many committed and enthusiastic people in the South Atlantic who are driving invasive species control work at the local level. However, it is also evident that the resources available in this sparsely populated region are not sufficient to deal with the enormity of some of the most pressing invasive species issues. Territory governments, non-governmental organisations and researchers from the South Atlantic and the United Kingdom should continue to collaborate to find resources for the continuation of invasive species work in the region. The Strategy provides a guide; the next phase is implementation.

ACKNOWLEDGEMENTS

The South Atlantic Invasive Species Strategy could not have been developed without the full support of all the project partners: the Governments of St Helena, Ascension Island, Tristan da Cunha, the Falklands, and South Georgia.
and the South Sandwich Islands, along with Falklands Conservation and the St Helena National Trust. All members of the Regional Advisory Group and enthusiastic attendees at the Ascension workshop were also vital to this process. This work was funded through the European Union’s EDF-9 fund through Project No9 PTO REG 5/1;

REFERENCES


Miller, C. 2007. Increasing regional capacity to reduce the impacts of invasive species on the South Atlantic United Kingdom Overseas Territories. Project No 9 PTO REG 5/1; PTR 003/05/EDF IX. Interim report 1 - submission date November 2007. RSPB report to the European Commission.

Miller, C. 2008. Increasing regional capacity to reduce the impacts of invasive species on the South Atlantic United Kingdom Overseas Territories. Project No 9 PTO REG 5/1; PTR 003/05/EDF IX. Interim report 2 - submission date December 2008. RSPB report to the European Commission.


RSPB. 2006. Application to 9th EDF - Increasing regional capacity to reduce the impacts of invasive species on the South Atlantic United Kingdom Overseas Territories.


Stringer, C. 2010. Increasing regional capacity to reduce the impacts of invasive species on the South Atlantic United Kingdom Overseas Territories. Project No 9 PTO REG 5/1; PTR 003/05/EDF IX. Final report - submission date March 2010. RSPB report to the European Commission.